DOCUMENT RESUME

ED 267 353 CG 018 934

AUTHOR Cole, Catherine A.; Singh, Surendra
TITLE The Effect of Locus of Control on Message Acceptance and Recall.
PUB DATE 6 Aug 85
NOTE 15p.; Paper presented at the Annual Convention of the American Psychological Association (93rd, Los Angeles, CA, August 23-27, 1985).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Advertising; College Students; Higher Education; *Locus of Control; *Memory; *Persuasive Discourse; *Recall (Psychology)

ABSTRACT

Locus of control is a personality trait that influences human behavior in many situations. Internal-external control reactions to a persuasive message and the recall of the message were examined in two studies. In the first study, 35 undergraduate students' locus of control was measured using Duttweiler's Internal Control Measure. On the basis of this measurement, subjects were classified as having an internal or external locus of control. Subjects then received either an advertisement with high or moderate credibility. Subjects' manipulation, a measure of message acceptance and behavioral intentions, was measured. The results showed that externally-oriented people were more responsive to advertisements than were internally-oriented consumers. In the second study, 114 undergraduates were again classified as having internal or external locus of control and then received highly or moderately credible advertisements. Organized and unorganized product listings were used in which product features were either grouped or not grouped. The personality trait of locus of control was not found to affect message acceptance or behavioral intentions, but it was found to affect the amount learned. These results emphasize the importance of recall and persuasion when evaluating advertising. (ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED267353

THE EFFECT OF LOCUS OF CONTROL ON MESSAGE ACCEPTANCE AND RECALL

Catherine A. Cole, Ph.D.
Assistant Professor
Department of Marketing
University of Iowa
Iowa City, Iowa 52242

Surendra Singh, Ph.D.
Assistant Professor
Department of Marketing
University of Kansas
Lawrence, Kansas 66045

CG 018934

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Catherine Cole

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

s2m1col 8/6/85

ABSTRACT

This study investigates the relationship between a particular personality trait and a person's sensitivity to external information. It is argued that people with high external control orientations will be sensitive to the credibility of the source when persuasion is the criterion variable. It is also expected that externals will be sensitive to organization cues in persuasive messages when recall of message content is the criterion variable. Conversely, people with high internal control orientations will be insensitive to source effects and organizational cues. These hypotheses are tested using a recently developed measure of locus of control (Duttweiler, 1984).

INTRODUCTION

For a number of reasons, studies examining the power of personality characteristics to explain choices made by consumers have proved to be disheartening. [For excellent reviews of this topic see Kassarjian, 1971; Kassarjian and Sheffett, 1975, 1981.] However, there has been fruitful research on the circumstances when personality variables act as moderating variables in consumer information processing [Crosby and Grossbart, 1984; Green and DeSarbo, 1979; Nakanishi, 1972]. In this paper, we ask what is the relationship between a person's locus of control orientation and his or her response to an advertisement for a new product?

Locus of control is a personality trait that influences human behavior in a wide range of situations [Biondo and MacDonald, 1971; Tucker, 1980]. This construct was first developed by Rotter in his theory of social learning [Rotter, 1954, 1966]. According to Rotter, internal control refers to the tendency to attribute to oneself some control over one's reinforcements. External control refers to the tendency to attribute to fate, chance or powerful others control over one's reinforcements. Intuitively, one suspects that people with high external orientations will be very sensitive to external cues in an advertisement, while people with high internal orientations will be relatively insensitive to external cues.

We conducted two experiments to empirically test our intuitive hunches. In the first experiment, we investigated how a person's internal-external orientation influences reactions to a persuasive message when the credibility of the source is varied. In the second experiment, we examined how the same personality characteristic affects recall of the persuasive message when the organization of message content is varied. In both studies we posit that

externally oriented respondents will be more influenced by external cues such as message source and organization than internally oriented subjects.

This research differs from the existing literature in several ways. First we used a recently designed measure of locus of control (see Duttweiler, 1984 for a discussion of the advantages of this scale). Second, we studied these issues in a consumer behavior context. Our study used an advertisement for a new food product. We believe that the way in which personality variables influence information processing is an important issue for marketers.

EXPERIMENT 1

BACKGROUND

One relevant study predicted and found that "externals" are more sensitive to communicator's status than "internals" (Ritchie and Phares, 1969). These authors argued that "externals" tend to perceive a source who is low in power, status or authority as representing a lessened possibility of controlling their reinforcements than one who is high in status. Thus they hypothesized that "externals" would be less inclined to accept influence from a low prestige than from a high prestige source. On the other hand, "internals" expecting to control reinforcement themselves might tend to accept influence equally from both high and low prestige communicators.

PURPOSE

The purpose of the first study was to test this relationship between locus of control, source credibility, message acceptance and behavioral intention in a consumer behavior context.

HYPOTHESIS

The following key hypothesis was tested:

H1: Externally oriented people will be more persuaded by a persuasive message from a credible source than from a noncredible source, while internally oriented people will not be affected by the source of the message.

METHODOLOGY

1. Design and Independent Variables

A 2x2 design including two levels of locus of control (internal vs. external) and two product endorsers (highly vs. moderately credible) were used. Locus of control was assessed by administering Duttweiler's 28 item Internal Control measure to 35 undergraduate students. Subjects scoring in the upper 50% were classified as internal, subjects scoring in the lower 50% were classified as external. At a second meeting subjects were randomly assigned to receive one of 2 versions on an advertisement for a new food product. Students assigned to the high credibility condition saw an advertisement for a new food product that contained an endorsement letter from the editor of Gourmet Cooking and the founder of New York City's finest cooking school. Subjects receiving the moderately credible manipulation saw the same advertisement except that the endorser was the assistant manager for Star Discount foods.

After examining the advertisement, subjects were given a short questionnaire which included a manipulation check, a measure of message acceptance and behavioral intentions. They were not allowed to refer back to the advertisement.

2. Dependent Variables

There were two dependent variables: message acceptance and behavioral intentions. Both were multi-item semantic differential scales. The message acceptance scale had 9 items anchored with terms such as useful and not useful. Coefficient alpha was .82. The behavioral intention scale had three items anchored with terms such as definitely would try this product and definitely would not try this product. Coefficient alpha was .85.

RESULTS AND DISCUSSION

1. Manipulation Check

A six item semantic differential scale was constructed to determine whether or not credibility was manipulated. Coefficient alpha was .89. The ANOVA results for the credibility manipulation are reported in Table I. The significant source effect indicates that the highly credible source was in fact perceived as more credible than the moderately credible source.

2. Message Acceptance and Behavioral Intentions

The analysis of variance results reported in Table I do not support the central hypothesis. There was no source by locus effect when either message acceptance or behavioral intentions was the dependent variable. There was a significant locus effect (P=.06), which arose because externally oriented people reported more message acceptance and higher behavioral intentions than internally oriented people. The means are reported in Table I.

3. Discussion

These results suggest that externally oriented people are more responsive to advertisements in general than internally oriented consumers. Externally oriented people responded more positively to the advertised product and were more willing to try it than internally oriented people.

EXPERIMENT II

BACKGROUND

A recent study by Ellis and Franklin (1983) suggests that a person's locus of control effects how subjects organize information in memory. They argue and find that "internals" and "externals" recall information equally well when the stimulus information is organized in a semantic fashion. However, if the stimulus information is organized in a relatively superficial non-semantic manner, "externals" are distracted and utilize less efficient non-semantic encoding schemes. Consequently, they will recall less than "internals" who do not use external cues to direct their encoding strategies.

PURPOSE

The purpose of this second study is to replicate the first experiment and to determine if locus of control orientation affects recall of salient dimensions of an advertisement if the information is organized or unorganized.

HYPOTHESES:

The following key hypotheses were tested:

H1: Externally oriented people will be more persuaded by a persuasive message than internally oriented people.

This is the result from Experiment I.

H2: Externally oriented people will recall more from organized messages than from unorganized messages, while internally oriented people's recall will not be influenced by the organization of message content.

This is the result obtained by Ellis and Franklin, 1983.

METHODOLOGY

1. Design and Independent Variables

A 2x2x2 design including two levels of locus of control (internal vs. external), two endorsers (highly vs. moderately credible) and two types of product attribute listings (organized and unorganized) were used. 114 undergraduate students enrolled in introductory marketing classes participated in the study. Locus of control and source of message were varied as in the first study. Organization was manipulated by designing an organized and unorganized version of the endorsement letter. In the organized version, the nine key product features were listed under three headings: ease of preparation, high nutrition content and excellent quality. In the unorganized version the headings were simply listed in the first paragraph of the endorsement letter and the nine attributes were randomly ordered. (Copies of the advertisement are available from the first author.)

3. Dependent Variables

There were three dependent variables: message acceptance, behavioral intentions and product attribute recall. The first two semantic differential scales were the same as those used in the previous study. Recall was assessed by asking subjects to risk as many of the characteristics of the product which were mentioned in the advertisement as they could remember. A naive judge counted the number of attributes.

RESULTS AND DISCUSSION

1. Manipulation Check

The results from the ANOVA on the credibility measure are reported in Table II. As can be seen, source had a significant effect on credibility so

that subjects perceived the highly credible source as more credible than the moderately credible source.

2. Message Acceptance and Behavioral Intentions

As can be seen from Table II there was no significant effect for locus of control on message acceptance or on behavioral intentions. This does not support the results from experiment I.

3. Recall of Product Attributes

As can be seen from Table II there is a marginally significant organization by locus of control interaction. This occurred because internals recalled the same number of attributes whether the attributes were organized or not, confirming one part of hypothesis 2. However, externals recalled more when the message was unorganized than when it was organized.

4. Discussion

This second study found that the personality trait locus of control did not affect messages acceptance or behavioral intentions, but did affect amount learned.

CONCLUSION

In advertising research it has been suggested that practitioners use personality variables after the market has been segmented along objective dimensions such as age, income, sex and product usage. Each subgroup may vary in terms of personality attributes such as locus of control orientation. These psychological differences may affect reactions to advertising.

The results from this study confirm the suspicion that individual differences in persuasibility and learning can sometimes be attributed to a personality trait such as locus of control. The fact that the first and

second experiment do not produce similar results with regard to message acceptance and behavioral intentions is frustrating and confusing. The explanation may lie in the characteristics of the subject population. In the first study all 35 subjects received the questionnaire at the same time from a familiar administrator. The externally oriented subjects may have guessed that purpose of the study and thus may have reported higher liking for the product. In the second study, the subjects received the questionnaires in small groups of 6-10. The administrator of the questionnaire was the same as in the first study, but she was unfamiliar to these students. Thus the purpose of the study may have been more disguised so that the external subjects were not tempted to respond in what they perceived to be the appropriate manner.

The fact that the source of the message and the organization have differential effects on message acceptance and learning lends support to the observation that message acceptance is not dependent on learning of message content (Love and Greenwald, 1978). It also emphasizes the importance of using both recall and persuasion as criteria for evaluating advertising effectiveness (Ross, 1982).

BIBLIOGRAPHY

Biondo, J. and _. MacDonald, "Internal-External Control and Response to Influence Attempts," Journal of Personality, 1974, 407-419.

Crosby, L. and S. Grossbart, "A Blueprint for Consumer Behavior Research on Personality," in T. Kinnear, ed., Proceedings, 1984, 11, 447-452, Ann Arbor, Association for Consumer Research.

Duttweiler, P., "The Internal Control Index: A Newly Developed Measure of Locus of Control," Educational and Psychological Measurement, 1984, 44: 209-221.

Ellis, H. and J. Franklin, "Memory and Personality: External Versus Internal Locus of Control and Superficial Organization in Free Recall," Journal of Verbal Learning and Verbal Behavior, 1983, 22: 61-74.

Green, Paul E. and W. Desarbo, "Componential Segmentation in the Analysis of Consumer Tradeoffs," Journal of Marketing, 1977, 43, 83-91.

Kassarjian, H., "Personality and Consumer Behavior: A Review," Journal of Marketing Research, 1971, 8, 409-418.

Kassarjian, H. and M. Sheffet, "Personality and Consumer Behavior: One More Time," AMA 1975 Combined Proceedings, 1975, 37, 197-201.

_____, "Personality and Consumer Behavior: An Update," in Perspectives in Consumer Behavior, 1981, Glenview, IL: Scott Foresman and Company, 160-180.

Love, R. and A. Greenwald, "Cognitive Responses to Persuasion as Mediators of Opinion Change," Journal of Social Psychology, 1978, 104, 231-241.

Nakanishi, M., "Personality and Consumer Behavior: Extensions," in M. Venkatesan, ed., Proceedings, 1972, 61-65, Ann Arbor, Association for Consumer Research.

Ritchie, E. and E. Phares, "Attitude Change as a Function of Internal-External Control and Communicator Status," Journal of Personality, 1969, 37, 429-443.

Ross, H., "Recall Versus Persuasion: An Answer," Journal of Advertising, 1982, 22, 13-16.

Rotter, J., Social Learning and Clinical Psychology, Englewood Cliffs, N.J.: Prentice-Hall, 1954.

_____, "Generalized Expectancies for Internal versus External Control of Reinforcement," Psychological Monographs, 1966, 80, (1, Whole No. 609).

_____, "Some Problems and Misconceptions Related to the Construct of Internal vs. External Control of Reinforcement," Journal of Consulting and Clinical Psychology, 1975, 48: 56-67.

Tucker, L. R., "Identifying the Environmentally Responsible Consumer: The Role of Internal-External Control of Reinforcements," Journal of Consumer Affairs, 1980, 14: 326-340.

TABLE I

Cell Means for Experiment I

Independent Variables			Dependent Variables: Credibility	Message Acceptance	Behavioral Intentions
	Highly Credible Source	Externals N=10	24.00	32.7	15.4
		Internals N=8	22.38	28.38	12.75
	Moderately Credible Source	Externals N=10	18.3	29.5	13.5
		Internals N=8	11.5	24.0	11.0

ANOVA RESULTS FOR EXPERIMENT I

	DF	Credibility MS	Credibility F	Message Acceptance MS	Message Acceptance F	Behavioral Intentions MS	Behavioral Intentions F
Source	1	576	10.68*	124.69	2.14	30.25	1.49
Locus	1	157.73	2.92	214.51	3.68**	58.94	2.92***
Source x Locus	1	59.51	1.10	3.07	.05	.05	.002

*$p \leq .05$
**$p \leq .07$
***$p \leq .10$

BEST COPY AVAILABLE

TABLE II

Cell Means for Experiment II

				Credibility	Message Acceptance	Behavioral Intentions	Recall
Highly Credible Source	Organized	"Externals"	N=17	22.65	27.82	11.12	4.18
		"Internals"	N=12	21.65	27.67	12.11	4.56
	Unorganized	"Externals"	N=10	21.60	25.79	11.68	5.05
		"Internals"	N=16	20.94	25.14	10.64	3.79
Moderately Credible Source	Organized	"Externals"	N=17	17.59	29.65	12.18	4.65
		"Internals"	N=11	16.56	24.75	11.9	5.00
	Unorganized	"Externals"	N=19	15.05	26.70	11.3	5.2
		"Internals"	N=12	16.8	27.44	11.19	4.88

ANOVA RESULTS FOR EXPERIMENT II

	DF	Credibility MS	Credibility F	Message Acceptance MS	Message Acceptance F	Behavioral Intentions MS	Behavioral Intentions F	Recall MS	Recall F
Source (S)	1	737.94	21.84*	24.40	.32	2.77	.15	7.54	2.11
Locus (L)	1	1.118	.03	43.66	.56	1.15	.06	2.06	.55
Organization (O)	1	36.02	1.07	40.7	.53	6.68	.35	1.67	.44
S x L	1	13.56	.40	16.03	.21	.09	.01	1.53	.41
S x O	1	2.20	.07	23.14	.30	1.41	.07	.08	.02
L x O	1	20.9	.61	42.37	.55	6.20	.32	9.16	2.41
S x L x O	1	6.89	.20	62.65	.81	7.95	.42	1.57	.42

*$p \leq .01$
**$p \leq .12$

s2m1col 8/6/85